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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/822,231

04/02/2001

Kiyoaki Fujikura

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07/12/2006

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EXAMINER

PARK, CHAN S

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/822,231

Applicant(s)

FUJIKURA, KIYOAKI

Examiner

CHAN S. PARK

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**DOUGLAS Q. TRAN**  
**PRIMARY EXAMINER**

*Tran*

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- Chan S. Park*
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment was received on 5/1/06, and has been entered and made of record. Currently, **claims 1-14** are pending.

### *Response to Arguments*

2. Upon review of the reference of the applicant's admitted prior art (hereinafter Prior Art), which was cited in the Office Action dated 1/30/06 under 35 U.S.C. 102(e), as being anticipating claims 1-12, the examiner notes that the reference can still be interpreted as anticipating the claims, as currently amended.

Before discussing the 102(e) rejection, the arguments regarding the rejection under 35 U.S.C. § 112, second paragraph, are not persuasive. The claims appear to indicate that the applicant's invention prevents the mechanical controller from detecting no printing medium error when there is no printing medium in the printing engine.

Moreover, the applicant states that "*the present invention makes it possible to print a plurality of logical pages in physical-page units even when the logical-page lengths of the logical page units differ.*" The examiner respectfully notes that comparing the difference and determining whether the logical-pages can be printed in the physical length of one page is absolutely **irrelevant** to the detecting of no printing medium error because even if the logical-pages can be printed in the physical length of one page based on the calculation, the printer will still detect the "no printing medium" when there is no paper present/available for printing these "calculated/determined" logical-pages. It

is extremely confusing as to how the preventing step is performed when there is no paper to begin with. Does the invention teach the method of printing the print data on something other than the printing medium? Perhaps, the claims should be more specific and clear as to what the term "no printing medium error" means.

Furthermore, the applicant fails to provide specific explanations to overcome the rejection under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. The currently amended claim recites "when the logical-pages can be printed in the physical length of one page, by comparing the total physical length of the logical-pages and the physical length of one page of the printing medium." It appears that, by the comparison, it determines whether the logical-pages can be printed in the physical length of one page. However, this particular comparison alone cannot determine whether the logical-pages can be printed in the physical length of one page. For example, what if there are two 12-inch pages to be printed? How does the total physical length, which is 24-inch, compare whether it can be printed on one page or not? Doesn't the physical length of each page have to be shorter than the physical length of one page (11-inch) in order to print them on the 11-inch paper? Mere calculation of the total physical length does not determine whether the logical-pages can be printed in the physical length of one page.

Therefore, the rejection under 35 U.S.C. § 112, second paragraph, is maintained.

Now, referring to the Prior Art rejection, the applicant states that the Prior Art fails to disclose the limitation of “when the logical-pages can be printed in the physical length of one page, by comparing the total physical length of the logical-pages and the physical length of one page of the printing medium.” The examiner disagrees. Specifically, referring to fig. 10B, since all four pages are printed according to the total physical length of the logical-pages and the physical length of one page of the printing medium, no printing medium error occurs. Thus, the error is prevented.

Furthermore, referring to fig. 11B, it is apparent to one of ordinary skill in the art that if the fourth page is less than 4-inch (for example 2-inch), it will be printed without ‘paper out’ error. If the applicant disagrees, explanation as to why this fourth logical page (2-inch page) cannot be printed according to the Prior Art disclosed in fig. 11B is respectfully requested. Moreover, it is unclear why the fourth page having the length of 4-inch cannot be printed before the ‘paper out’ detection according the fig. 11B. Explanation as to why this is occurring in the Prior Art is also requested.

Therefore, the rejection under 35 U.S.C. § 102(e) is maintained and repeated in the office action.

It is also noted that the applicant fails to response to the questions raised in the Office Action dated 1/30/06 (‘Conclusion’ in pages 8-9). The examiner respectfully requests the applicant to explain why the fourth page will not be printed according to fig. 11A. The figure appears to indicate that there is space left to print the remaining page (fourth page). Shouldn’t the ‘paper out’ error occur after printing the fourth page?

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Please read the arguments presented above.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-12 are rejected under 35 U.S.C. 102(a) as being anticipated by the applicant's admitted prior art disclosed in the Background of the Invention (hereinafter Prior Art).

4. With respect to claim 1, Prior Art discloses a printer apparatus (fig. 8), which is specified by the host to print in logical-page units, the printer comprising:

a mechanical controller that receives a printing command, controls a printing engine that prints on a printing medium, and detects when there is on printing medium in the printing engine (fig. 11A); and

a printer controller that receives a printing instruction from the host to print in logical-page units, creates printing data and sends the printing data to the mechanical controller (page 1, lines 20-27);

wherein the printer controller calculates the total physical length of the logical pages after creating the printing data and prevents the mechanical controller from detecting no printing medium error according to the calculated total physical length of the logical-pages and a physical length of one page of the printing medium.

Please read the arguments presented above.

5. With respect to claim 2, Prior art discloses the printer apparatus of claim 1, wherein the printer controller creates bitmap data for each logical page as the printing data according to the printing instruction from the host for printing in logical-page units (page 1, lines 20-27) until the total physical length of plurality of the logical pages reaches the physical length of one page of the printing medium, and then sends the print command and the bitmap data in logical-page units to the mechanical controller in the logical-page units (page 2, lines 1-20).

6. With respect to claim 3, Prior Art discloses the printer apparatus of claim 1, wherein the printer controller receives logical-page lengths from the host, and calculates the total physical length of the logical-pages (page 2, lines 1-20).

7. With respect to claim 4, Prior Art discloses the printer apparatus of claim 1, wherein the printer controller calculates a physical length of the total logical pages, according to logical-page lengths and number of logical pages received from the host (page 2, lines 1-20).

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8. With respect to claim 5, Prior Art discloses the printer apparatus of claim 1, wherein the printer engine comprises an engine for printing on continuous printing medium, having a set fold length, as the printing medium (page 2, lines 1-10).

9. With respect to claim 6, Prior Art discloses the printer apparatus of claim 1, wherein the printer controller checks a physical length in the logical-page units (page 2, lines 1-20).

10. With respect to claim 7, arguments analogous to those presented for claim 1, are applicable.

11. With respect to claim 8, arguments analogous to those presented for claim 2, are applicable.

12. With respect to claim 9, arguments analogous to those presented for claim 3, are applicable.

13. With respect to claim 10, arguments analogous to those presented for claim 4, are applicable.

14. With respect to claim 11, arguments analogous to those presented for claim 5, are applicable.

15. With respect to claim 12, arguments analogous to those presented for claim 6, are applicable.



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art.

16. With respect to claim 13, referring to fig. 10A, when the printer controller detects that the calculated total physical length of the logical pages (total length of 3<sup>rd</sup> and 4<sup>th</sup> pages) matches the physical length of one page of the printing medium, it would have been obvious to one of ordinary skill in the art to clear out the no printing error flag to perform the printing since the fourth page can be printed before the error occurs according to fig. 10A. Therefore, it would have been obvious to obtain the invention as specified in claim 13.

17. With respect to claim 14, arguments analogous to those presented for claim 13, are applicable.

***Conclusion***

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

If the applicant wishes to discuss the rejections/arguments presented above, the examiner is willing to grant an interview to expedite the disposition of this case.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

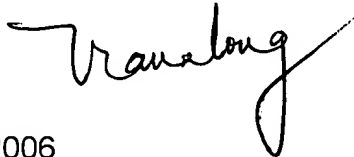
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571) 272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**DOUGLAS Q. TRAN**  
**PRIMARY EXAMINER**



csp  
June 29, 2006

Chan S. Park  
Examiner  
Art Unit 2625

